In the Specification:

Please add the following new paragraph before the paragraph beginning at page 1, line 1, which starts with "The present invention relates":

This application claims the priority to the International Application No. PCT/IB2003/000794, entitled "Watermark Time Scale Searching," filed February 26, 2003. The specification of the above-identified application is incorporated, in its entirety, herein by reference.

Please replace the previous page 3 of the specification with the attached resubmitted page 3 of the specification.

Please replace the paragraph beginning at page 6, line 4, which starts with "Preferably, as shown in Fig" with the following amended paragraph:

Preferably, as shown in Fig. 3a, the filter H is a linear phase band pass filter characterized by its lower cut-off frequency f_L and upper cut-off frequency f_H. As can be seen in Fig. 3b, the filter H has a linear phase response with respect to frequency f within the pass-band *(BW)*. Thus, when H is a band pass filter, x_b and $\bar{x}_b$ are the in-band and out-of-band components of the host signal respectively. For optimum performance, it is preferable that the signals x_b and $\bar{x}_b$ are in phase. This is achieved by appropriately compensating for the phase distortion produced by filter H. In the case of a linear phase filter, the distortion is a simple time delay.

Preferably, said buffer is of total length M, the total number of scale searches conducted is $N_\eta = \frac{M}{2}(\eta_{max} - \eta_{min})$ where η_{min}, η_{max} correspond respectively to the minimum and maximum likely time scale modifications of the signal.

Preferably, said initial estimates of the sequence of symbols comprises a sequence of N_b estimates for each symbol, each of the N_b estimates corresponding to a different time offset of a symbol.

Preferably, the scale search in the next detection window is adapted based on the information acquired during the current detection window.

Preferably, the scale space is searched using an optimal searching algorithm.

Preferably, the searching algorithm is the grid refinement algorithm.

In another aspect, the present invention provides a computer program arranged to perform the method as described above.

In further aspects, the present invention provides a record carrier comprising the computer program, and a method of making available for downloading the computer program.

In another aspect, the present invention provides an apparatus arranged to compensate for a linear time scale change in a received signal, the signal being modified by a sequence of symbols in the time domain, the apparatus comprising: an extractor arranged to extract an initial estimate of the sequence of symbols from said received signal; and an interpolator arranged to form an estimate of a correctly time scaled sequence of the symbols by interpolating the values of said initial estimate.

Preferably, the apparatus further comprises a buffer arranged to store one or more of said estimates.

In another aspect, the present invention provides a decoder comprising the apparatus as described above.

For a better understanding of the invention, and to show how embodiments of the same may be carried into effect, reference will now be made, by way of example, to the accompanying diagrammatic drawings in which:

Figure 1 is a diagram illustrating a watermark embedding apparatus;

Figure 2 shows a signal portion extraction filter *H*;

Figures 3a and 3b show respectively the typical amplitude and phase responses as a function of frequency of the filter H shown in Fig. 2;